

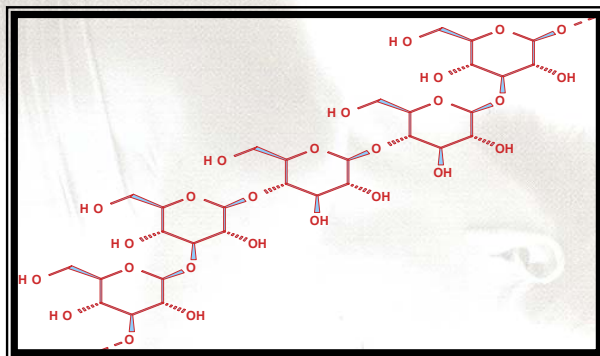
# DRAGO- $\beta$ -GLUCAN

PRODUCT # 111957

## A UNIQUE NATURAL SKIN PROTECTIVE & IMMUNE-STIMULATING AGENT

### PRODUCT DESCRIPTION

- ❑ INCI Name: Water (Aqua), Butylene Glycol, Glycerin, Avena Sativa (Oat) Kernel Extract
- ❑ New patented process technology offers Oat- $\beta$ -Glucan as a clear, odorless, semi-viscous liquid
- ❑ 1% solution of Oat- $\beta$ -Glucan in water
- ❑ Can be easily formulated into cosmetic preparations



### BENEFITS

- ❑ Improves extrinsic signs of aging (*in vivo* test)
- ❑ Photo protection (*in vitro* assay)
- ❑ Stimulates immune defense (*in vitro* assay)
- ❑ Stimulates fibroblast collagen synthesis (*in vitro* assay)
- ❑ Heals micro cuts
- ❑ Cost effective
- ❑ DRAGO- $\beta$ -GLUCAN is of superior quality in comparison to other sources

### APPLICATIONS

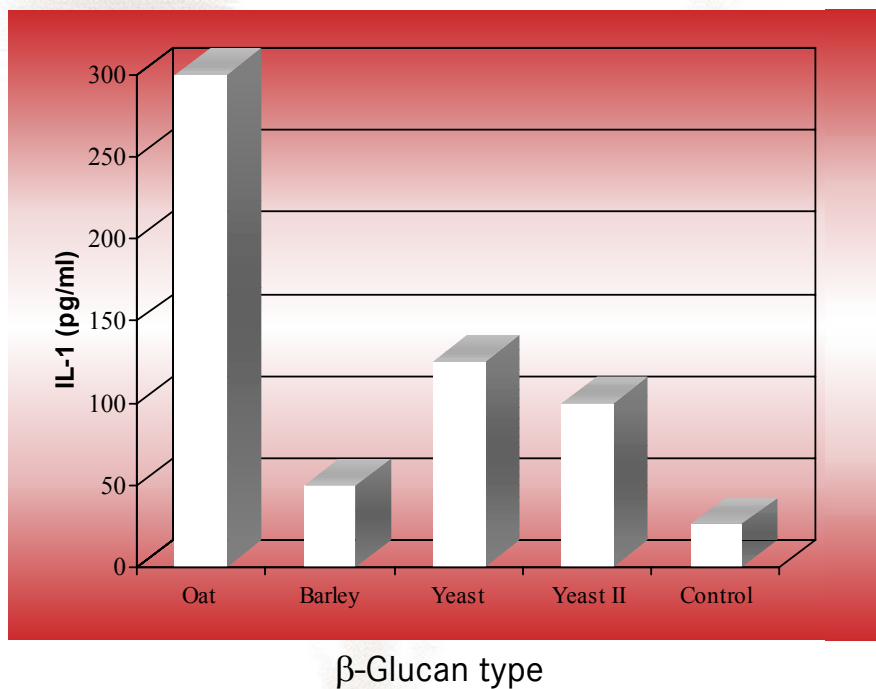
- |                                    |         |
|------------------------------------|---------|
| ❑ Moisturizing facial formulations | 1 - 10% |
| ❑ Body lotions                     | 1 - 5%  |
| ❑ Sun care                         | 1 - 10% |

symrise   
creating brands. supporting brands.

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## IL-1 RELEASE FROM VARIOUS $\beta$ -GLUCAN TYPES



### CONTRAST TO YEAST GLUCANS

- ❑ Yeast- $\beta$ -Glucans are insoluble
- ❑ Yeast- $\beta$ -Glucans exhibit 1.6-Glucose linkage
- ❑ Oat- $\beta$ -Glucans generate more IL-1a. Release is not accompanied by TNF- $\alpha$ -production.

